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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/502,425

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Alexandre Joly

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EXAMINER

SAUNDERS JR, JOSEPH

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

07/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/502,425

Applicant(s)

JOLY, ALEXANDRE

Examiner

Joseph Saunders

Art Unit

2614

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-45 is/are pending in the application.
- 4a) Of the above claim(s) 25-28 and 34-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24 and 43-45 is/are rejected.
- 7) ☒ Claim(s) 29-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 5, 2010 has been entered. Claims 24 – 45 are currently pending, claims 25 – 28 and 34 – 42 are withdrawn from further consideration, and claims 24, 29 – 33, and 43 – 45 are considered below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 24 and 43 – 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Srinivasan (US 7,006,555), hereinafter Srinivasan.

Claim 24: Srinivasan discloses a method of qualitatively evaluating a digital audio signal ("Audio Quality Measure (AQM)," Column 20 Line 9 – Column 21 Line 50), comprising:

calculating, using a measuring system ("an audibility score, which is designated herein as the audio quality measure (AQM), can be computed in order to determine when instances of potentially audible code segments occur"), in real time, in continuous time, and in successive time windows ("Let it be assumed that blocks of 512 samples at a 48 kHz sampling rate are used to compute the AQM," and "blocks are grouped consecutively in a sequence") a quality indicator wherein:

said quality indicator is obtained from said digital audio signal that represents an analog audio signal ("AQM computation may be based on psycho-acoustic models that are widely used in audio compression algorithms such as Dolby's AC-3, MPEG-2 Layers I, II, or III, or MPEG-AAC. The AQM computation discussed below is based on MPEG-AAC. However, the AQM computation may be based any of these audio compression algorithms. (For example, in the Dolby AC-3 audio compression method, a Modified Discrete Cosine Transform (MDCT) spectrum is used for computing the masking levels"),

said quality indicator is associated with each of said time windows ("The total AQM score for the whole block can be obtained at the step 56 from equation (19) by summing across all 42 critical bands according to the following equation:" (20)), and

said quality indicator comprises a number of elements which is at least one hundred times less than the number of audio samples in a time window, said number being from 1 to 10 (AQM_{TOTAL} , see equation 20); and

directly estimating quality of said digital audio signal as a function of said quality indicator ("If it is determined at the step 56 that AQM_{TOTAL} is greater than a

predetermined threshold AQM_{THRESH_i} , then the corresponding block is not considered to be suitable for encoding").

Claim 43: Srinivasan discloses a method according to claim 24, wherein the digital audio signal to be evaluated is an audio signal transmitted digitally ("Audio signals are usually digitized at sampling rates that range between thirty-two kHz and forty-eight kHz. For example, a sampling rate of 44.1 kHz is commonly used during the digital recording of music. However, digital television ("DTV") is likely to use a forty eight kHz sampling rate," Column 4 Lines 32 – 50, and transmitter/receiver, Figure 1)

Claim 44: Srinivasan discloses a method according to claim 24, wherein the digital audio signal has had digital coding applied ("Compression of audio signals is performed in order to reduce this data rate to a level which makes it possible to transmit a stereo pair of such data on a channel with a throughput as low as 192 kbits/s," Column 4 Lines 51 – 55).

Claim 45: Srinivasan discloses a method according to claim 44, wherein said digital coding is bit rate reduction coding ("Compression of audio signals is performed in order to reduce this data rate to a level which makes it possible to transmit a stereo pair of such data on a channel with a throughput as low as 192 kbits/s," Column 4 Lines 51 – 55).

Allowable Subject Matter

4. Claims 29 – 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 24 and 43 – 45 have been considered but are moot in view of the new ground(s) of rejection to Srinivasan.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./
Examiner, Art Unit 2614

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614